



## MODIFICATION INSTRUCTIONS

for the

### KODAK MINILOADER 1,

#### MODELS STAND-ALONE, and PROCESSOR INTERFACE

Service Codes 3211, & 3212

### MODIFICATION No. M35

and for the

### KODAK MINILOADER 1M

#### MODELS STAND-ALONE, and PROCESSOR INTERFACE

Service Codes 3234 & 3235

### MODIFICATION No. M04

## Type 2

### PURPOSE:

To install a HUMIDIFIER to maintain the humidity inside the MINILOADER. This will reduce problems associated with FILM curl and static artifacts which may occur at low humidity.

**IMPORTANT:** Only qualified service personnel should install this modification!

<b>SERIAL NUMBERS:</b>	Miniloader 1 Stand-Alone	(3211)	ALL
	Miniloader 1 Processor-Interface	(3212)	ALL
	Miniloader 1M Stand-Alone	(3234)	ALL
	Miniloader 1M Processor-Interface	(3235)	ALL

**INSTALLATION TIME:** Approximately 1 hour.

**SPECIAL TOOLS:** HUMIDITY METER 29050132

**PARTS REQUIREMENT:** Modification kit 30092035  
See parts lists on page 2.

**PARTS AVAILABILITY:** February 1994

## **PARTS LISTS**

<b>PART NO.</b>	<b>DESCRIPTION</b>	<b>QUANTITY</b>
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30092035	MODIFICATION KIT	1
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### **THE KIT CONTAINS:**

30027102	HUMIDIFIER ASSY MINILOADER 1 & 1M	1
30027133	CABLE, HUMIDIFIER SUPPLY	1



This equipment includes parts and assemblies sensitive to damage from electrostatic discharge. Use caution to prevent damage during all service procedures.

### **PLEASE NOTE**

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## INTRODUCTION.

The MODIFICATION replaces the existing right HAND SIDE PANEL of the MINILOADER with a new SIDE PANEL containing a HUMIDIFIER. The new SIDE PANEL is 55 mm thicker than the original. The drawings below show the outlines of the machines with the HUMIDIFIER fitted and the position of the plumbing connections. The position of the WATER INLET and the DRAIN vary according to the model and configuration.

### WATER SUPPLY

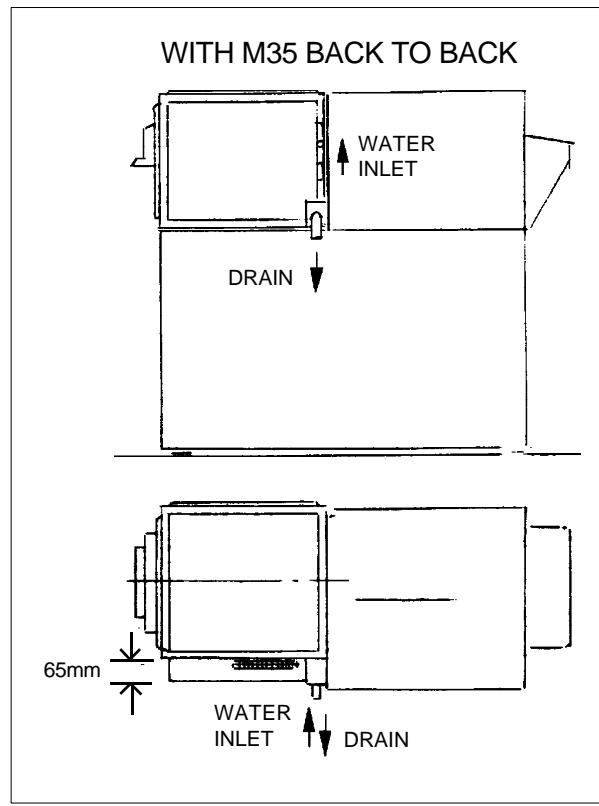
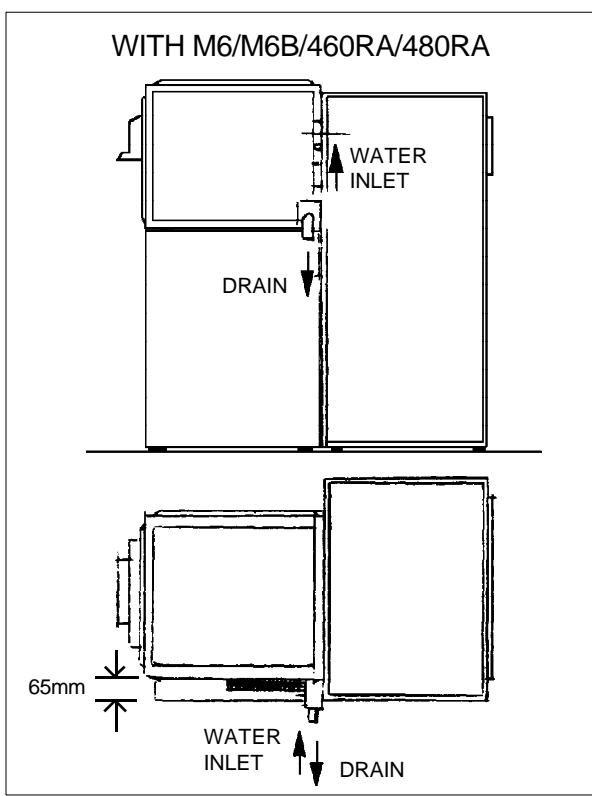
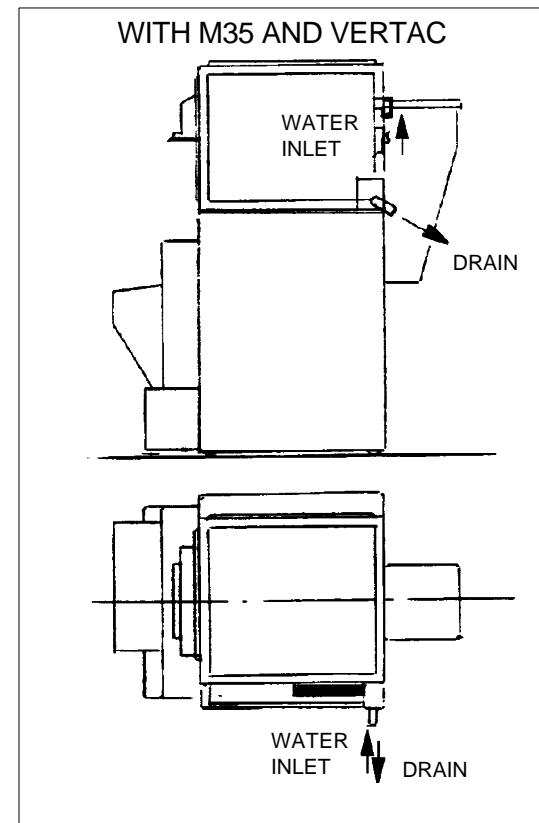
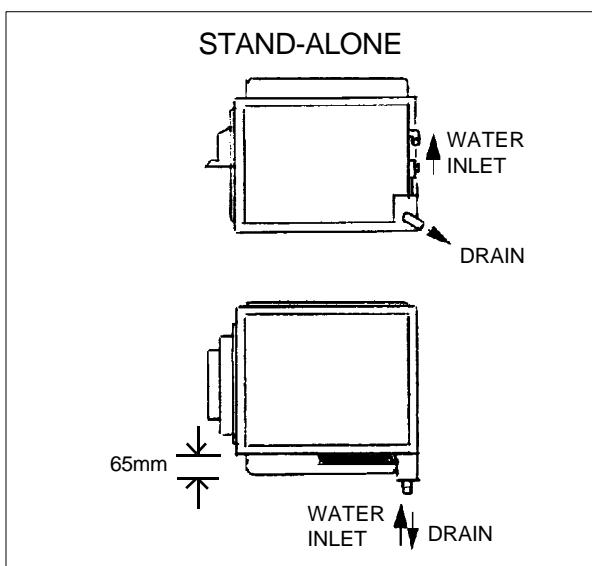
The incoming water supply specification is:-

Pressure range 0.3 to 5 Bar

Temperature 4 to 29°C

Volume approx. 1 litre/day

NOTE:- A 50 micron water filter should be provided by the customer.



## MODIFICATION INSTRUCTIONS

1. Check that all the parts are present in the MODIFICATION KIT.
2. Remove the SUPPLY MAGAZINES, and turn off the power to the MINILOADER.
3. Remove the TOP COVER, FRONT PANEL, REAR PANEL and right hand SIDE PANEL.
4. Peel back the FOAM STRIP and remove the FAN SUPPORT and the FAN, see FIGURE 1.
5. Cut the wires to the FAN and discard the ASSEMBLY. Insulate the ends of the WIRES.
6. For MINILOADER 1M go to STEP 8.
7. For MINILOADER 1, remove FUSE F4 from PCB 106/106A/106B and discard. See FIGURE 2. Go to STEP 11.

FIGURE 1

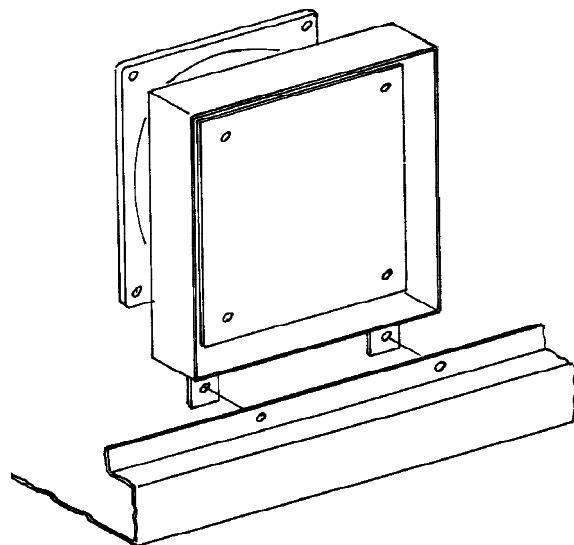


FIGURE 2

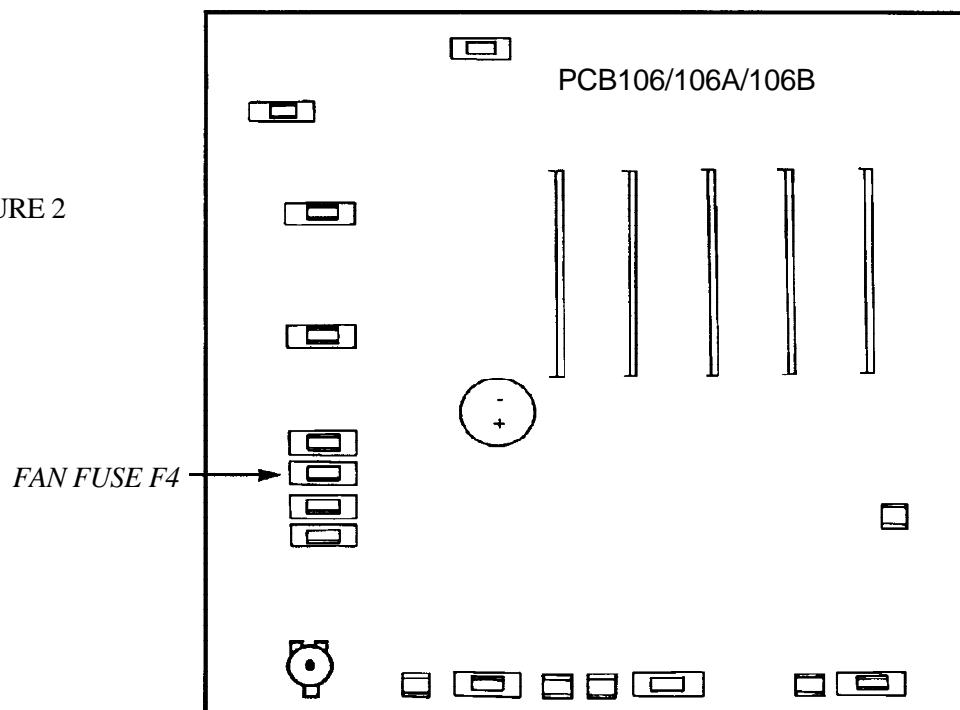


FIGURE 3

8. For MINILOADER 1M, disconnect the FAN SUPPLY WIRE B4 from PLUG X107-6 on PCB 301, see FIGURE 3. Insulate the end of the WIRE.
9. Disconnect the FAN SUPPLY WIRE N4 from TB1-17 on the MAINTERM-INAL BLOCK (inside the ELECTRICAL BOX). Insulate the end of the WIRE.
10. Remove FUSE F4 from PCB 301. See FIGURE 3.

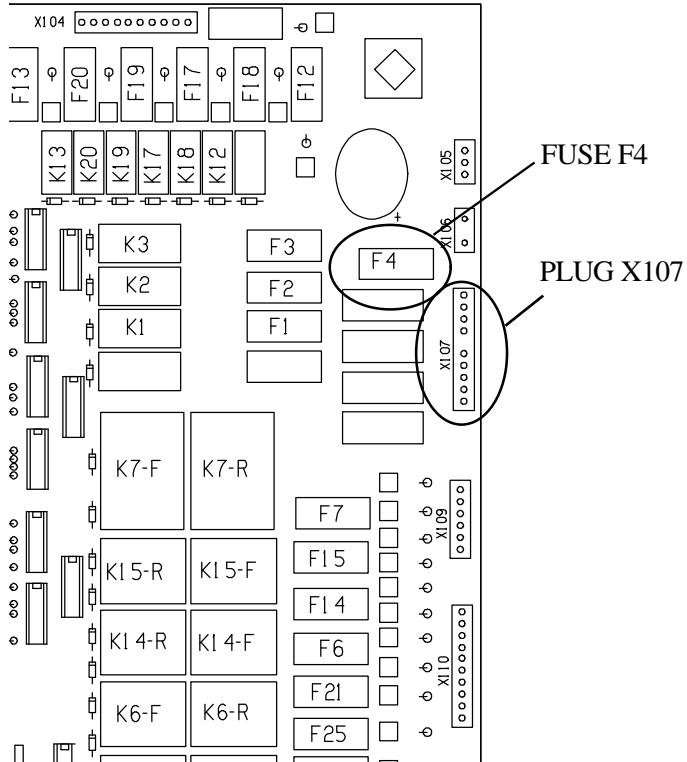


FIGURE 4

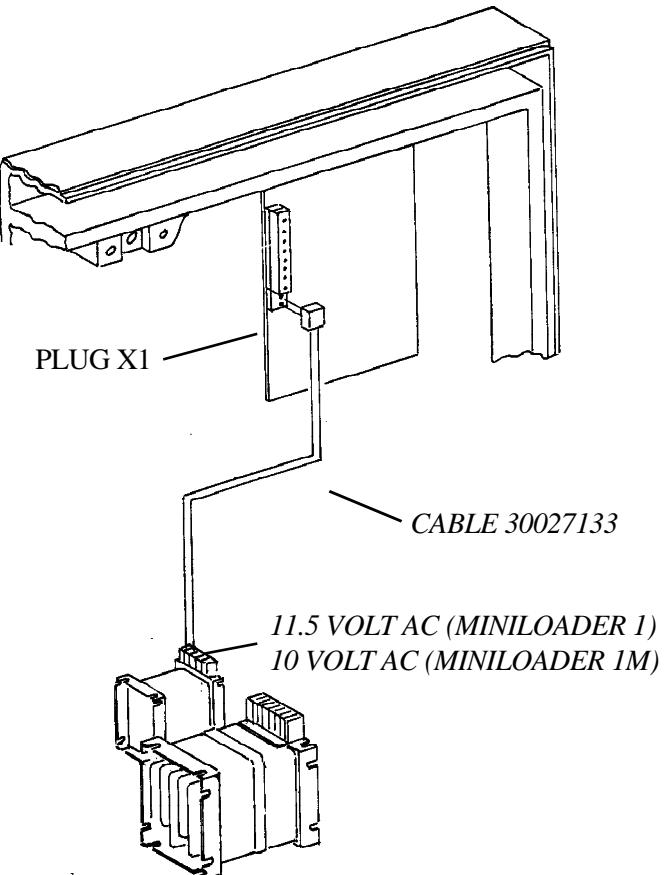
11. Connect the new CABLE 30027133 to the TRANSFORMER.

For MINILOADER 1 use the 11.5 volt TAPPING of TRANSFORMER T1.

For the MINILOADER 1M use the 10 volt AC terminals of TRANSFORMER T2 - TB3-1 and TB3-2.

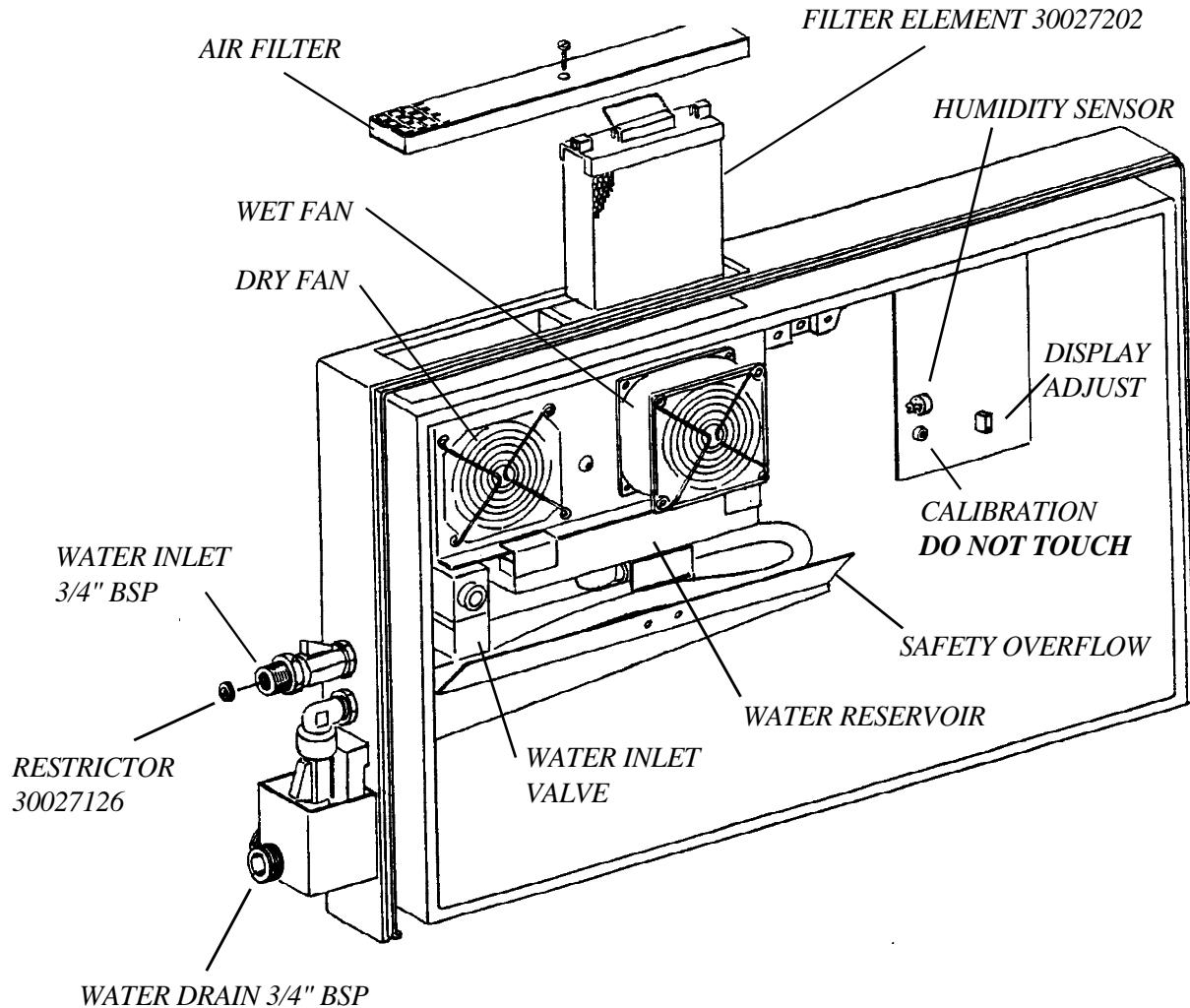
Feed the CABLE under the SIDE PLATE. See FIGURE 4.

12. Plug the CABLE into the PLUG X1 on the HUMIDIFIER PCB, and fit the HUMIDIFIER to the MINILOADER.



12. Connect the WATER SUPPLY using a WASHING MACHINE HOSE and the DRAIN (a HOSE CONNECTOR is supplied) to the HUMIDIFIER. Note - if using a BOTTLE to supply water to the HUMIDIFIER the RESTRICTOR 30027126 must be removed See FIGURE 5.

FIGURE 5

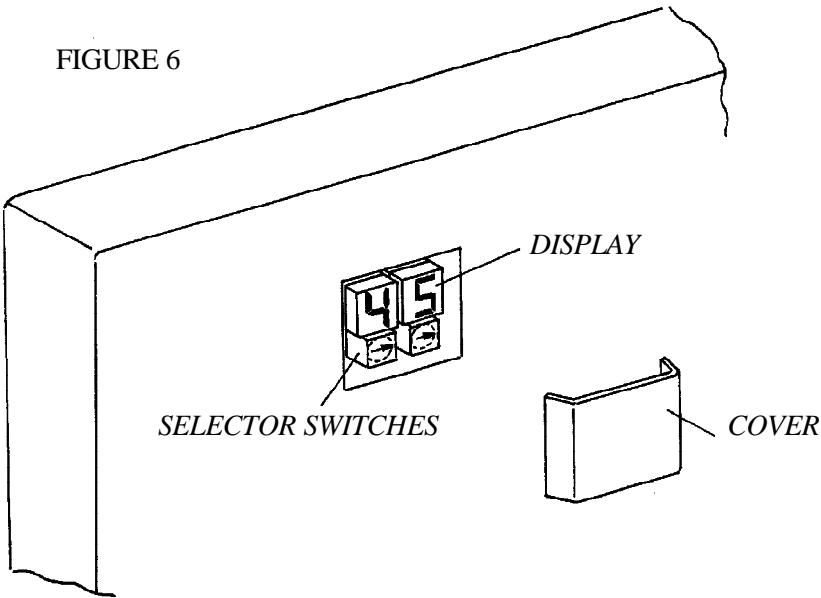


13. If necessary install the HUMIDIFIER FILTER.

Go to PAGE 8.

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- 14.** Remove the clear plastic COVER and set the SELECTOR SWITCHES to the desired humidity. The recommended preset is 45%RH. Replace the COVER. See FIGURE 6.



- 15.** Replace all the covers and power up the MINILOADER. The HUMIDIFIER should switch on automatically. If the humidity inside the MINILOADER is greater than the preset value, only the DRY FAN will run. If the humidity is below the preset value, the INLET WATER VALVE opens, the DRY FAN stops and the WET FAN starts to increase the humidity inside the MINILOADER.

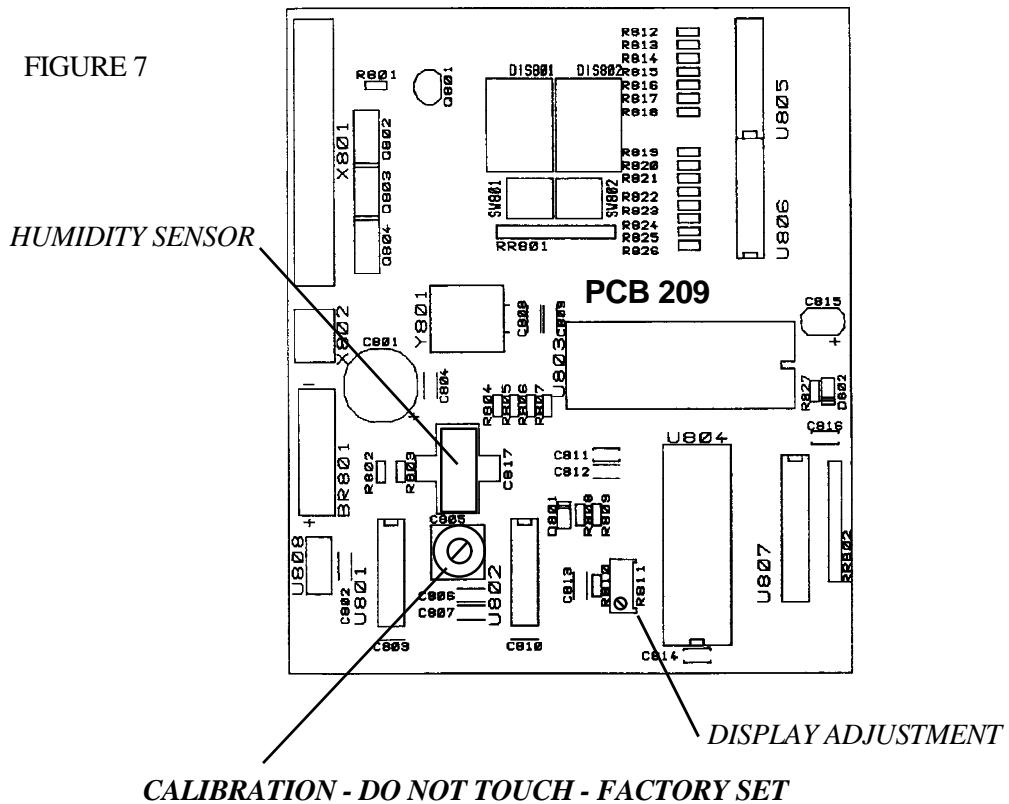
**IMPORTANT :-** If the humidity inside the MINILOADER is different (either higher or lower) from the preset value after 10 minutes, the figures on the DISPLAY will flash. If the humidity is higher than the preset nothing can be done, but if the humidity is lower, check the water supply, FLOAT VALVE and the FILTER ELEMENT.

- 16.** The calibration of the HUMIDITY SENSOR is factory set, but if a HUMIDITY METER (29050132) is available the calibration of the DISPLAY can be adjusted. After the unit has stabilised (after 30 minutes), measure the humidity inside the MINILOADER by inserting the PROBE of the HUMIDITY METER through the ENTRY SLOT. Compare the reading on the HUMIDITY METER with the HUMIDIFIER DISPLAY. If necessary the HUMIDIFIER DISPLAY reading can be adjusted by POTENTIOMETER R11 on the HUMIDIFIER PCB 209. See FIGURE 7.

**IMPORTANT - DO NOT TOUCH THE VARIABLE CAPACITOR ON YOU WILL UPSET THE FACTORY SETTING.**

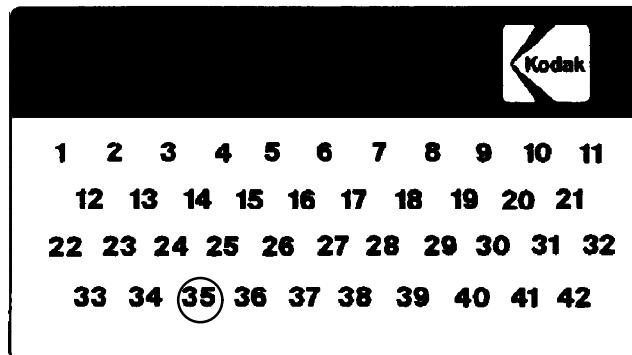
The SERVICE DETAILS for the HUMIDIFIER including the PARTS LIST will shortly be released as PUBLICATION XP3291-1.

FIGURE 7

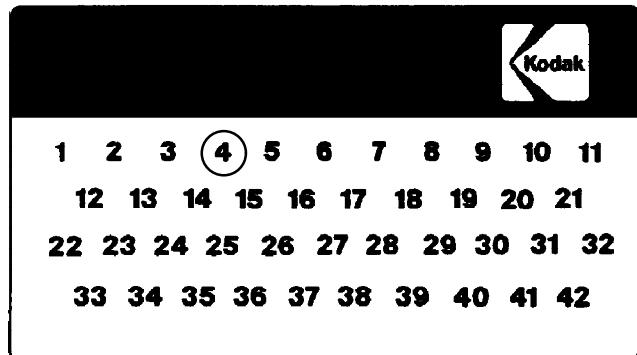


- 17.** Circle the appropriate MODIFICATION on the MODIFICATION STICKER inside the MINILOADER. MODIFICATION M35 for MINILOADER 1. MODIFICATION M04 for MINILOADER 1M.

# **FOR MINILOADER 1**

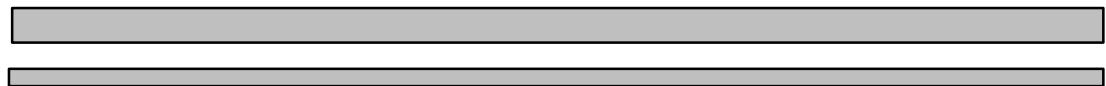


## **FOR MINILOADER 1M**





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